2 Product Specifications

2-1 Specifications

Item	Description
Picture Tube:	17-Inch (43 cm): 16-inch (40.6 cm) viewable, Flat-face, 90˚ Deflection, 0.20 mm (Horizontal) / 0.25 mm (Diagonal) Dot pitch, Silica coated with anti-electrostatic properties (TCO: Multilayer coating), Medium-short persistence phosphor
Scanning Frequency	Horizontal : 30 kHz to 85 kHz Vertical : 50 Hz to 160 Hz
Display Colors	Unlimited colors
Maximum Resolution	Horizontal : 1792 Dots, Vertical : 1344 Lines
Input Video Signal	Analog, 0.7 Vp-p positive at 75 Ω, internally terminated
Input Sync Signal	Separate Sync : TTL level, positive/negative
Maximum Pixel Clock rate	135 MHz
Active Display	Horizontal : 312 mm ± 4 mm, Vertical : 234 mm ± 4 mm
Input Voltage	AC 90 to 264 Volts, 60 Hz or 50 Hz ± 3 Hz
Power Consumption	100 Watt (max)
Dimensions (W x D x H)	Unit : 20.19 x 16.81 x 15.87 Inches (513 x 427 x 403 mm) Carton : 20.19 x 22.52 x 20.87 Inches (513 x 572 x 530 mm)
Weight (Net/Gross)	39.7 lbs (18.0 kg) / 46.3 lbs (21.0 kg)
Environmental Considerations	Operating Temperature : 32°F to 104°F (0°C to 40°C) Humidity : 10 % to 80 % Storage Temperature : -4°F to 113°F (-20°C to 45°C) Humidity : 5 % to 95 %

- Above models comply with SWEDAC (MPR II) recommendations for reduced electromagnetic fields.
- Designs and specifications are subject to change without prior notice.

2-2 Pin Assignments

Sync Type / Pin No.	Separate	Macintosh
1	Red	GND-R
2	Green	Red
3	Blue	H/V Sync.
4	N-C	Sense 0
5	DDC Return	Green
6	GND-R	GND-G
7	GND-G	Sense 1
8	GND-B	Reserved
9	N-C	Blue
10	GND-Sync. /Self-raster	Sense 2
11	N-C	GND
12	DDC Data	V-Sync.
13	H-Sync.	GND-B
14	V-Sync.	GND
15	DDC Clock	H-Sync.

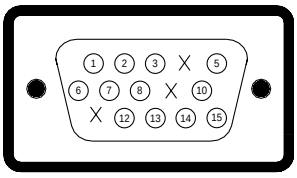


Figure 2-1. Male Type

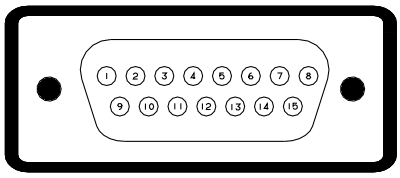


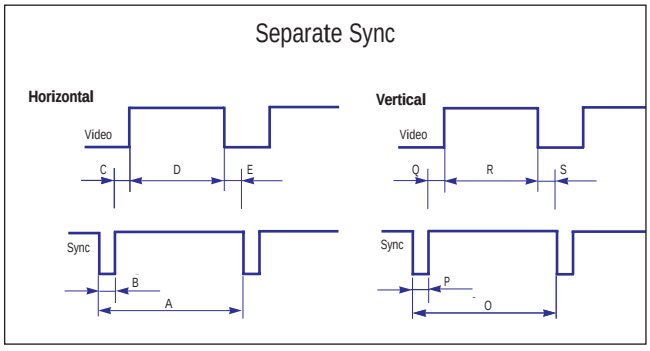
Figure 2-2. Male Type

2-3 Timing Chart

This section of the service manual describes the timing that the computer industry recognizes as standard for computer-generated video signals.

Table 2-1. Timing Chart

Mode / Timing	IBM		VESA						
	VGA2/70 Hz 720 x 400	VGA3/60 Hz 640 x 480	640/75 Hz 640 x 480	640/85 Hz 640 x 480	800/75 Hz 800 x 600	800/85 Hz 800 x 600	1024/75 Hz 1024 x 768	1024/85 Hz 1024 x 768	1280/75 Hz 1280 x 1024
fH (kHz)	31.469	31.469	37.500	43.269	46.875	53.674	60.023	68.677	79.976
A µsec	31.778	31.777	26.667	23.111	21.333	18.631	16.660	14.561	12.504
B µsec	3.813	3.813	2.032	1.556	1.616	1.138	1.219	1.016	1.067
C µsec	1.907	1.907	3.810	2.222	3.232	2.702	2.235	2.201	1.837
D µsec	25.422	25.422	20.317	17.778	16.162	14.222	13.003	10.836	9.481
E µsec	0.636	0.636	0.508	1.556	0.323	0.569	0.203	0.508	0.119
fV (Hz)	59.940	70.087	75.000	85.008	75.000	85.061	75.029	84.997	75.025
O msec	16.683	14.268	13.333	11.764	13.333	11.756	13.328	11.765	13.329
P msec	0.064	0.064	0.080	0.671	0.064	0.056	0.050	0.044	0.038
Q msec	1.048	1.080	0.427	0.578	0.448	0.503	0.466	0.524	0.475
R msec	15.253	12.711	12.800	11.093	12.800	11.179	12.795	11.183	12.804
S msec	0.318	0.413	0.027	0.023	0.021	0.019	0.017	0.015	0.013
Clock Frequency (MHz)	25.175	28.322	31.500	36.000	49.500	56.250	78.750	94.500	135.000
Polarity H.Sync	Negative	Negative	Negative	Negative	Positive	Positive	Positive	Positive	Positive
V.Sync	Negative	Positive	Negative	Negative	Positive	Positive	Positive	Positive	Positive
Remark	Separate	Separate	Separate	Separate	Separate	Separate	Separate	Separate	Separate



A : Line time total	B : Horizontal sync width	O : Frame time total	P : Vertical sync width
C : Back porch	D : Active time	Q : Back porch	R : Active time
E : Front porch		S : Front porch	

Memo